

SECTION C

STATEMENT OF WORK (SOW) FOR THE PORTSMOUTH GASEOUS DIFFUSION PLANT DEVELOPMENT OF A DOE SAFETY BASIS ENVELOPE FOR TRANSFER OF FACILITIES INTO SURVEILLANCE AND MAINTENANCE ACTIVITIES

1. Introduction

The U.S. Department of Energy (DOE) Office of Environmental Management (EM) is responsible for the cleanup and legacy waste management activities at the Portsmouth Site in Portsmouth, Ohio. This contract is a Cost Plus Fixed Fee contract to develop an interim safety basis envelope to transfer Nuclear Regulatory Commission (NRC) controlled documents to an approved DOE format, and to eventually transfer USEC leased facilities to DOE controlled facilities. The development of an interim safety basis envelope places DOE into a position to take possession of these NRC licensed facilities as DOE Hazard Category 2 and 3 Nuclear Facilities under the surveillance and maintenance (S&M) mode.

2. Background

Consistent with the 1992 Energy Policy Act, DOE has leased portions of the land, facilities, and equipment of the Portsmouth (PORTS) Site, commonly referred to as the Portsmouth Gaseous Diffusion Plant (GDPs), to the United States Enrichment Corporation (USEC) for Uranium enrichment operations, while it retains responsibility for environmental restoration and related legacy waste management activities, including the future decommissioning of the facilities upon final plant shut down. Upon privatization in 1998, USEC operated the plant under a Nuclear Regulatory Commission (NRC) Certificate until they notified DOE that they would cease operations and terminate the lease. Currently, these Portsmouth facilities are in a Cold Shutdown mode (CSD) and minimum operations are being performed to support Cold Shutdown.

3. Scope

The Contractor shall develop a 10 CFR 830 compliant, but alternate format safety basis envelope, for the transfer of the USEC GDP facilities to DOE for future S&M activities at the Portsmouth site. The development of the DOE safety basis envelope will be partially accomplished by the collection and organization of appropriate NRC information (NRC SAR sections, natural phenomenon analysis, design basis accident analysis, etc.). These NRC documents constitute the program of the present NRC compliant S&M operations being performed. Our

objective is to utilize these documents to produce a 10 CFR 830 compliant approach for DOE to take over these S&M operations from USEC. The on-site NRC documents will be made available at the PORTS DOE office. These base documents will be augmented by the generation of DOE Order required documents necessary for a graded but compliant DOE safety basis envelope for facility S&M. This contract should identify all the documents required; however, the generation of the S&M procedure documents is anticipated to be performed outside of this contract.

4. Applicable Directives

The Contractor shall comply with DOE directives identified in Part III, Section J, Attachment "Applicable DOE Directives." The full text of DOE directives is available at <http://www.directives.doe.gov>. The generation of the DOE safety basis envelope for S&M is required to be compliant with 10 CFR 830. DOE anticipates the content of these documents will meet the 10 CFR 830 objectives without necessarily meeting the 10 CFR 830 format requirements.

5. DOE Format Requirements

The Contractor shall identify DOE formatted documents to augment the existing NRC data for the development of the 10 CFR 830 compliant safety basis envelope approach. DOE has released several implementation guides describing suggested non-mandatory approaches for meeting the parent rule 10 CFR 830 including DOE G 414.1-2, DOE G 421.1-2, DOE G 423.1-1, and DOE G 424.1-1. In an effort to further improve the implementation of Subpart B of 10 CFR 830, DOE has also updated three standards to support the 830 rule, DOE STD 3009-94 Change Notice 2, *Preparation Guide for U.S. DOE Nonreactor Nuclear Facility Safety Analysis Reports*; DOE STD 1104-96, *Review and Approval of Nonreactor Nuclear Facility Safety Analysis Reports*; and DOE STD 3011-2002, *Guidance for Preparation of Basis for Interim Operation (BIO) Documents*. Using the graded approach identified in these standards and guides, DOE STD 1120-2005, *Integration of Environment, Safety, and Health into Facility Disposition Activities*, quantifies the upper tier documents required to establish a safety authorization basis for GNP S&M activities performed.

6. Performance Requirements

The Contractor shall provide a justifiable graded safety basis envelope to meet 10 CFR 830 requirements for S&M site-specific to Portsmouth. This safety basis envelope is for an interim time period prior to the acquisition of an S&M or D&D contractor to take over the USEC transferred facilities and complete fully compliant 10 CFR 830 Documented Safety Analyses (DSAs) in a DOE format. This Task Order will allow DOE to establish the Safety Basis Envelope for transfer of the GDP facilities in the earliest possible timeframe. The Contractor shall complete the following:

- a. A recommended path forward of a justifiable graded approach to provide a DOE compliant Safety Basis Envelope which meets 10 CFR 830 requirements for S&M of GDP PORTS nuclear facilities site-specific to Portsmouth.
- b. The identification, collection and organization of appropriate documents that constitute the present NRC compliant S&M operation into a compliant 10 CFR 830 set of documents for DOE S&M operations. An organized list and description of the documents shall be provided by the Contractor.
- c. A 10 CFR 830 compliant Safety Basis Envelope. This includes the collection and organization of DOE compliant documents to augment the above NRC documents which are required for a graded but compliant DOE safety basis envelope for facility S&M at Portsmouth. This also includes the identification of other documentation required to augment and make whole the Safety Basis Envelope. This Safety Basis Envelope includes at least a facility description, facility hazard characterization, initiating events, preventive/mitigation controls and actions, and operations/processes using hazardous materials, including wastes.

7. Travel

The Contractor shall make an initial trip to the DOE facility in Piketon, Ohio to solidify the present site conditions and initial parameters. At least three additional trips to the Portsmouth site will be necessary to 1) Present and outline the justifiable graded approach, 2) Provide the collection and organization of the NRC documents and drafts of the required augmented DOE documents, and 3) Present the final Safety Basis Envelope. Additional trips to the Portsmouth site may be required.

8. Deliverables

- A. The Contractor shall provide deliverables in accordance with, Section J, Attachment C "Deliverables." The following deliverables shall not be separately priced.
 - 1. The presentation of a recommended path forward (justifiable graded approach) to provide a DOE compliant Safety Basis Envelope which meets 10 CFR 830 requirements for S&M of GDP PORTS nuclear facilities site-specific to Portsmouth. The presentation will consist of a written report and a MS-PowerPoint briefing charts, both in contractor suggested format. The contractor shall make a one-hour verbal presentation to DOE-PPPO at Portsmouth.

2. The identification, collection and organization of appropriate documents that constitute the present NRC compliant S&M operation into a compliant 10 CFR 830 set of documents for DOE S&M operations. An organized list and description of the documents shall be provided by the Contractor in a contractor suggested format. The list will be in MS-Word to allow for adjustments as necessary by DOE. The Contractor shall provide the list to the Contracting Officer by email.
3. The identification, collection, and organization of DOE compliant documents to augment NRC documents which are required for a graded but compliant DOE safety basis envelope for facility S&M at Portsmouth. The presentation will consist of a written report and MS-PowerPoint briefing charts, both in contractor suggested format. The contractor shall make a one-hour verbal presentation to DOE-PPPO at Portsmouth.
4. A Final Presentation to the DOE requires the Contractor to present and justify their 10 CFR compliant Safety Basis Envelope. Electronic and one (1) hard copy of the Safety Basis Envelope package shall be provided by the Contractor to DOE-PPPO. The presentation will consist of a written report and MS-PowerPoint briefing charts, both in contractor suggested format. The contractor shall make a one-hour verbal presentation to DOE-PPPO at Portsmouth.